

REMARKS

Basis for the amendment to claim 1 may be found in original claim 8. It is respectfully urged that this amendment does not raise any new issues as it merely inserts a dependent claim into the independent claim 1.

In paragraph 1 of the Office Action claim 8 is objected to because of the following informality. The Examiner states that the "Dmin" should be identified. It is assumed that the Examiner desires a particular number for Dmin to be inserted in claim 8. However, Dmin varies with each individual film. It is affected by time in storage before and after imaging, temperature and other factors. Dmin is the background development of silver not imaged and for the invention it is a desirable that the exposure produce a developed image 1.5 above the Dmin level, but the Dmin level itself is not important to the invention. Therefore, it is respectfully requested that this objection be reconsidered and withdrawn.

In paragraph 3 claims 1, 2, 10, and 11 stand objected under 103 as being unpatentable over Bryant (081) in view of Bilhorn et al. (591). The Examiner states that Bryant discloses exposing a region of the element to create a latent image which is substantially uniform across the useful imaging width of the element, processing latent image to produce a density signal, sampling the density signal with a photometric device and analyzing the sample data to determine if there are regions where uniformity differs from that of uniform exposure. The Examiner states that Bryant does not disclose analyzing the sampled density data in the widthwise direction, but that choosing a scanning direction is well-known methodology routinely implemented in the art depending on design choice. Bilhorn is stated to teach that it is known to analyze the sample data in the widthwise direction to determine if there are regions where uniformity differs to locate linear defects on a photographic element. Bryant and Bilhorn are stated to be combinable as they are from the same field. The Examiner states it would have been obvious to one of ordinary skill in the art to have modified the analysis of the sample density data disclosed by Bryant to include analyzing the sample data in the widthwise direction.. The motivation is stated to be that it would have been well-known in the art and provides for inspection of defects in the lateral direction. This rejection is respectfully traversed.

Bryant is not performing a similar inspection system to that of the claimed invention. Bryant is looking for repetitive anomalies that could cause flickering. He is not looking for widthwise variation but looking at variation in exposure density along the length of the film. In contrast, the instantly claimed invention analyzes in the widthwise direction for uniformity of exposure. By analyzing in the widthwise direction linear defects can be located as points of nonuniformity. In contrast, Bryant is analyzing for uniformity differences between sections of the film not portions in the widthwise direction. Bilhorn et al. discloses a process of optical inspection to detect flaws in moving Web. The system utilizes infrared for inspection of the film prior to exposure. The system would not be able to detect streaks that show up after development. It is a system set up for manufacturing rather than use with developed film. The instant system creates a latent image and processes the latent image. The instant system then utilizes the information regarding location of the defects in processing digital images formed from the photographic element. There is no disclosure or suggestion in either reference of utilization of information in forming of an image. Information derived in both systems allows discarding of certain sections of the film rather than making use of the film. The invention system that would control for the defectg and form an image from digital information incorporating the information concerning defects. This invention is several steps from the Bilhorn et al. and Bryant processes which involve discarding portions of the film where images would not be satisfactory. In contrast the instant invention scans imperfect images and then utilizing the knowledge of the uniformity differences allows digital images to be printed that are corrected for the defects in the original image. There is no disclosure suggestion in Bryant or Bilhorn et al. to do this and therefore reconsideration and withdrawal of the rejection is respectfully requested.

In paragraph 4 claims 3 and 5-8 stand rejected under 35 USC 103 as being unpatentable over Bryant (081) and Bilhorn et al. (591) as applied to claim 1 above and further in view of Reem et al. (944). The Examiner states that Bryant does not appear to recognize exposing multiplicity of exposure levels very long length of the element. Reem is stated to teach that it is known to form a multiplicity of exposure levels on a photographic. The Examiner states that Reem et al. teaches that it is known to form a multiplicity of exposure levels on a photographic element. Therefore, the Examiner states it would be obvious to one

of ordinary skill that at the time of the invention to have modified the exposure disclosed by Bryant and Bilhorn to include exposing a multiplicity of exposure levels as taught by Reem because the variations alter the amount of density formed for different levels of exposure and simplifies detection of defects.. This rejection is respectfully traversed.

As urged above, Bryant and Bilhorn et al. do not teach or suggest a combination that leads to the instant invention where crossways defect information is utilized in processing a digital image derived from the photographic element. Reem et al. is not detecting defects in film, but rather is measuring gamma in order to provide gamma correction to photographic images produced from the filmstrip. There is no disclosure suggestion to combine Reem et al. with Bryant and Bilhorn to reach the instant invention. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

In paragraph 5 of the Office Action, claims 12-15 stand rejected under 35 USC 103 as being unpatentable over Bryant and Bilhorn et al. as applied to claim 1 and further in view of Kobayashi et al. (522). The Examiner states that Bryant does not appear to recognize employing alternate photographic processes. The Examiner states that Kobayashi teaches that it is known to process a latent image using an alternative photographic process employing a dry photographic process using pressure-sensitive developing film. The Examiner states it would be obvious to employ an alternate photographic process as taught by Kobayashi. This rejection is respectfully traversed. As urged above, Bryant and Bilhorn do not suggest the system of the invention. Kobayashi et al., as pointed out by the Examiner, does disclose alternate processing and image forming methods. However there is no disclosure suggestion that would overcome the deficiencies of the rejection of Bryant and Bilhorn et al. in claim 1, where the combination fails to disclose widthwise detection of defects in exposed film or the employing of the location of a defect in processing a digital image derived from the flawed photographic element. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

In paragraph 6, claim 4 stands rejected under 35 USC 103 as being unpatentable over Bryant and Bilhorn as applied to claim 1 and further in view of Prigent (971). The Examiner states that Bryant does appear to recognize averaging the samples signal, but that Prigent teaches that it is known to average

the samples of a density signal. The Examiner states that it would therefore be obvious at the time of the invention to modify the sampling of this density signal disclosed by Bryant and Bilhorn to include averaging as taught by Prigent. This rejection is respectfully traversed. Prigent measures variation along the length of the film and averages them together in order to adjust for thickness variations of the film. While Prigent teaches averaging, there is no disclosure or suggestion in Prigent which overcomes the above set forth deficiencies in the claim 1 rejection of over Bryant and Bilhorn et al. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

In paragraph 7, claim 9 stands rejected under 35 USC 103 as being unpatentable over Bryant and Bilhorn et al. as applied to claim 1 and further in view of Factor (217). The Examiner states that Bryant does not recognize employing the location of the defect in processing. The Examiner states that Factor teaches that is known to employ location of the defect on a photographic element in processing. The Examiner states it would therefore be obvious to one of ordinary skill at the time of the invention to have modified locating defects disclosed by Bryant and Bilhorn to include employing location in processing as taught by Factor al because it can be used to avoid exposure of images in the area containing defects. This rejection is respectfully traversed. Bryant and Bilhorn are discussed above. Factor discloses a system of raw material sensing in order to discard material without exposure. Scanning takes place prior to recording an image and then an image is not recorded on a photographic element found to be defective during the raw material sensing. The Factor reference does not expose an image defect location. Claim 9, now inserted in claim 1, sets forth employing location of the defect in processing a digital image derived from the photographic element. The invention takes a developed the image and corrects it digitally such that it can be reproduced if desired without the defect present in a digital image derived from the photographic element. This is not disclosed or suggested by Bryant or Bilhorn. Further, Factor does not disclose or suggest this as Factor is only concerned with detection of defects in unprocessed film in order to not carry out exposures in defective areas. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

Therefore, it is respectfully requested that the rejections under 35 USC 103 and the objection to claim 8 be reconsidered and withdrawn and that an early Notice of Allowance be issued in this application

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Paul A. Leipold", is written over a horizontal line.

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